

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) ~~In a disc drive having a spindle motor hub and a number of prewritten discs, each prewritten disc having a prewritten servo pattern and an alignment mark, a~~ method for forming a disc stack assembly to reduce servo pattern runout, the method comprising steps of:

- (a) placing a first prewritten disc comprising servo pattern information written in relation to an angular reference axis about the spindle around a motor hub of the disc drive;
- (b) aligning the disc alignment mark of the first prewritten disc in relation to a direction of a corresponding biasing force;
- (c) applying the corresponding biasing force to the first prewritten disc to pressingly engage the first prewritten disc against the spindle motor hub in relation to the angular reference axis;
- (d) repeating steps (a) through (c) for each remaining prewritten disc in the disc stack assembly; and
- (e) clamping the prewritten discs with a disc clamp to secure the position of each prewritten disc relative to the spindle motor hub.

2. (currently amended) The method of claim 1 wherein the ~~number of discs is 1~~ obtaining a disc step comprises obtaining a disc comprising servo pattern information written in relation to a radially disposed reference axis.

3. (currently amended) The method of claim 1 wherein the ~~number of discs is greater than 1~~ biasing the disc step comprises pressingly engaging against the disc in a direction along the reference axis.

4. (currently amended) The method of claim 3 ~~wherein the biasing forces are~~

applied at even angular intervals about an outer diameter of the prewritten discs 1
comprising:

obtaining a second disc comprising servo pattern information written in relation to a
second angular reference axis;

placing the second disc around the motor hub; and

biasing the second disc against the motor hub in relation to the second angular
reference axis.

5. (currently amended) The method of claim 3 ~~wherein the number of discs is an~~
~~even number 4~~ wherein the first and second discs are biased in different directions.

6. (currently amended) The method of claim 5 ~~wherein, for each disc in the disc~~
~~stack assembly, the corresponding biasing force for a particular disc is opposite from a~~
~~biasing direction corresponding to any disc above and below the particular disc 4~~
wherein the first and second discs are biased in substantially opposite directions.

7. (currently amended) The method of claim 1 wherein ~~at least one of the steps is~~
~~performed by a robotic assembly~~ the obtaining a disc step comprises obtaining a disc
wherein the angular reference axis comprises an indicia.

8. (currently amended) The method of claim 1 wherein ~~at least one of the steps is~~
~~performed by a human worker on an assembly line~~ the obtaining a disc step comprises
obtaining a disc wherein the angular reference axis comprises a laser index mark.

9. (currently amended) ~~A disc drive disc stack assembly formed in accordance with~~
~~the method of claim 1~~ The method of claim 1 wherein the obtaining a disc step
comprises obtaining a disc wherein the angular reference axis comprises a first indicia
on one side of the disc and a second indicia different than the first indicia on the other
side of the disc.

10. (currently amended) A ~~disc drive, comprising:~~

~~a housing;~~

~~a read/write head;~~

~~an actuator assembly to position the read/write head; and~~

~~a disc stack assembly comprising a disc biased against a spindle motor hub in~~

~~relation to a reference axis adapted for angularly orienting the disc for writing~~

~~servo pattern information to the disc before the disc is biased against the motor~~

~~hub, a disc clamp and a number of prewritten discs, each disc having an~~

~~alignment mark, the disc stack assembly formed by steps of:~~

~~(a) placing a first prewritten disc about the spindle motor hub of the disc drive;~~

~~(b) aligning the first prewritten disc alignment mark with a direction of a
corresponding biasing force;~~

~~(c) applying the corresponding biasing force to the first prewritten disc to
pressingly engage the first prewritten disc against the spindle motor hub;~~

~~(d) repeating steps (a) through (c) for every other prewritten disc in the disc
stack assembly; and~~

~~(e) clamping the prewritten discs with the disc clamp to secure the position of
each prewritten disc relative to the spindle motor hub.~~

11. (currently amended) The disc drive stack of claim 10 wherein the ~~number of
discs is 1~~ reference axis is radially disposed in relation to the disc.

12. (currently amended) The disc drive stack of claim 10 wherein the ~~number of
discs is greater than 1~~ comprising a second disc biased against the motor hub in relation
to a second reference axis adapted for angularly orienting the second disc for writing
servo pattern information to the second disc before the second disc is biased against the
motor hub.

13. (currently amended) The disc drive stack of claim 12 wherein the ~~biasing forces
corresponding to each prewritten disc are evenly spaced about the spindle motor hub~~
first reference axis and the second reference axis are substantially parallel.

14. (currently amended) The disc drive stack of claim 12 wherein the number of discs is an even number 10 wherein the reference axis comprises an indicia.

15. (currently amended) The disc drive stack of claim 14 10 wherein, for each disc in the disc stack assembly, the corresponding biasing force for a particular disc is opposite from a biasing direction corresponding to any disc above and below the particular disc the reference axis comprises a laser index mark.

16. (currently amended) The method disc stack of claim 10 wherein at least one of the steps is performed by a robotic assembly the angular reference comprises a first indicia on one side of the disc and a second indicia on the other side of the disc.

17. (currently amended) The method disc stack of claim ~~10~~ 16 wherein at least one of the steps is performed by a human worker on an assembly line first indicia is different than the second indicia.

18. (currently amended) ~~In a disc drive having a spindle motor hub and a number of prewritten discs, a method for forming~~ A data storage device comprising a disc stack assembly to reduce servo pattern runout, the method comprising constructed by steps of for biasing comprising:

placing a disc comprising servo pattern information written in relation to an angular reference axis around a motor hub; and

biasing the disc against the motor hub in relation to the angular reference axis

(a) ~~prewriting the servo pattern for each disc while applying biasing forces corresponding to each disc;~~

(b) ~~while forming the disc stack assembly, precisely monitoring the position and orientation of each disc relative to the biasing forces applied during the prewriting of the servo pattern;~~

(c) ~~placing each disc in a carrier for storage;~~

(d) ~~for a first prewritten disc at the time of forming the disc stack, taking the prewritten disc from the carrier and placing the prewritten disc about the spindle motor hub of the disc drive;~~

- (e) for the first prewritten disc, aligning the disc in relation to a direction of the corresponding biasing force applied during the prewriting of the servo pattern;
- (f) for the first prewritten disc, applying the same corresponding biasing force applied during the prewriting of the servo pattern to the disc to pressingly engage the disc against the spindle motor hub;
- (g) repeating steps (d) through (f) for each remaining prewritten disc in the disc stack assembly; and
- (h) clamping the prewritten discs with a disc clamp to secure the position of each prewritten disc relative to the spindle motor hub.

19. (currently amended) The ~~method~~ data storage device of claim 18 wherein at least one of the steps is performed by a robotic assembly the steps for biasing comprises: obtaining a second disc comprising servo pattern information written in relation to a second angular reference axis; placing the second disc around the motor hub; and biasing the second disc against the motor hub in relation to the second angular reference axis.

20. (currently amended) The ~~method~~ data storage device of claim ~~1~~ wherein all of the steps are performed by a robotic assembly 19 wherein the steps for biasing is characterized by biasing the first disc and second disc in different directions.